AMENDMENTS TO THE SPECIFICATION

Please amend the specification as follows

[0006] As noted, one of the reasons for presenting the abstracted view of the core network is that routing decisions required by the edge networks are simplified. For example, many core networks have a ring topology, such as a synchronous optical network (SONET) ring, and many of those ring networks impose timeslot continuity restrictions on allowable paths. Timeslot continuity is a requirement that traffic conveyed over successive links of the ring must occupy the same timeslot on adjacent links. Where timeslot continuity is not available, traffic cannot be routed through the adjacent links in sequence, even though each link, taken alone, has sufficient capacity to carry the traffic. Such a ~~constraint~~ problem introduces a ~~problem with routing~~ constraint in computing routes through the abstracted core, because ~~as~~ it is possible that capacity is available over a link **ab** between **A** and **B**, and a link **bc** between **B** and **C**, but traffic cannot transit **ab** and then **bc** in sequence. Such a ~~problem~~ constraint is termed "subset intransitivity", because transitivity (a well known mathematical property of binary relations asserting that for any **a,b,c**, if **a** is related to **b**, and **b** is related to **c**, then **a** is related to **c**) of the network fails if each of ~~**a,b,c** are~~ routes **ab** and **bc** are individually allowable but route **abc** (that is, routes **ab** and **bc** in sequence) is not allowable, in the same subnetwork.

[0007] Similar subset intransitivity is encountered in passive optical networks where wavelength continuity is required. In passive optical networks no optical fiber link of the passive optical network can transport two channels of a same wavelength. Accordingly a wavelength channel may be available on a first optical fiber link, and a second wavelength channel may be available on an adjacent link, but it is not possible to transmit a signal over both links in sequence.